



EPA

United States
Environmental Protection
Agency



Advancing Asset Management in Your Utility: A “Hands-On” Workshop (Managing Your Facility for Long-Term Sustainability)



September 12 & 13, 2007

Training Location:
RMSAWWA/RMWEA 2007 Joint Annual Conference
Keystone Conference Center
Keystone, CO

Sponsored by:

United States Environmental Protection Agency
Rocky Mountain Water Environment Association (RMWEA); Rocky Mountain Section American Water Works Association (RMSAWWA)

Registration Deadline: August 29, 2007 Register Early – Space is Limited

The Challenge: Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. This investment has played a substantial role in the sustained prosperity and quality of life of our country. But in many communities, this infrastructure is severely stressed from overuse, under-funding of maintenance and renewal, and aging.

A comprehensive approach to managing our capital assets is overdue – one that brings “state of the practice” advanced asset management (AAM) concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. This approach, first and foremost, is one that focuses relentlessly on providing **sustained performance of value to the customer at the lowest life-cycle cost and at an acceptable level of risk to the organization.**

The Focus: Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead. Practical, advanced techniques for better managing assets have been developed and refined in both the private sector in the US and in water and wastewater agencies around the world. Management thinking is centered on long-term effectiveness, service sustainability, and effective environmental management. *How can these advanced asset management concepts, tools and techniques be most effectively transferred into the water and wastewater industry, more specifically, into your agency? Where to start? How to proceed? How to select appropriate tools?*

The Workshops: The AAM challenge for US agency officials is one of “knowledge transfer.” **For this reason, these workshops have been designed as an extensive hands-on experience.** Each workshop:

- ◆ **Incorporates a real-world storyline** – Demonstrates advanced asset management as a way to approach difficult asset problems.
- ◆ **Participant exercises** – Experience the concepts, techniques and tools of advanced asset management.
- ◆ **Asset Management Experts provide case-based mentoring.** The agenda is built around five core questions.
- ◆ **Demonstrating, step-by-step, how an agency would select and deploy “Best Appropriate AAM Practices”.**

Agenda Highlights

Day ONE (7:30 am – 4:30 pm)

Registration & Continental Breakfast – 7:30 – 8:00 am

Introductions, Storyline, Background and Context

- Introduction of Storyline
- The Changing Utility Industry
- The Emerging Utility of Tomorrow

Overview of Fundamental Concepts and Core Practices

- A Definition of AAM
- The AAM Paradigm
- The Nine Building Blocks of AAM
- Managing the Asset Base's "Potential to Fail"
- Payoffs and Benefits, Downsides

Storyline and Worksheets – Tom's Very Bad Day

Core Questions 1: What is the Current State of My Assets?

- The Role of Expert Judgment – The "Delphi Group"
- Building a "Process Layout" Schematic
- Creating the "Asset Hierarchy"
- Defining the "Data Standard"
- Initial Condition Analysis, Remaining Physical Life
- Valuation/Asset Consumption/Financial Disclosure from a GASB Perspective

Core Question 2: What is My Required "Sustainable" Level of Service (LOS)?

- What Is "LOS?" Why Do It?
- How It Works (Strategic Level versus Operations Level)
- A "Balanced Scorecard" Approach

Core Question 3: Which Assets Are Critical to Sustained Performance?

- Understanding How My Assets Can Fail
- What the Likelihood of Failure Is
- What the Consequences Are
- How to Measure Our Agency's "Business Risk Exposure"

Core Question 4: What Are My Best Minimum Life-Cycle-Cost CIP and O&M Strategies?

- What Alternative "Treatment" (Management) Options Are Feasible?
- Which Is the Best Strategy – "Optimal Renewal Decision Making?"

Discussion, Q & A and Feedback

Day TWO (8:00 am – 3:45 pm)

Summary of Day 1, Outline of Day 2

Core Question 4: O&M (Continued)

- Using AAM to Drive Operations and Maintenance
- Moving Systematically into Reliability Centered and Condition-Based Maintenance

Core Question 4: CIP (Continued)

- Using AAM to Drive the CIP
- Strategic CIP Validation
- Building Your First Asset Management Plan (AMP) for the System
- Balancing CIP and O&M Requirements
- The Strategic CIP Business Plan

Core Question 5: What Is My Best Long-Term

Funding Strategy?

- So, Valuation Really Does Matter?
- Determining a Sustainable Renewal Funding Level
- Effectively Telling the Funding Story
- The "Whole of Business" Perspective – Using AAM for Rate Setting & Budgeting

Focus Topic 1: Deploying an AAM Program

- The Three Fundamental Deployment Strategies
- "Gap Analysis" Benchmarking & Developing the AAM Improvement Program
- The Human Side
- The Political Side
- Implementation Work Plans – Lessons Learned

Focus Topic 2: Meeting the IT Challenge – Toward an Enterprise Asset Management Systems (EAMS)

- Defining "Work Processes"
- Defining "System Functionality"
- Defining Data Needs and Data Flows
- Developing an EAMS Work Plan

Closing Summary, Questions, Comments, Evaluation, Discussion of Basic Audit

At the conclusion of the workshop, USEPA will provide a *Certificate of Participation*.

This certificate, along with a time-based agenda provides documentation for those attendees seeking CEUs.

About Our Trainers

Mr. Steve Allbee – USEPA Project Director, Gap Analysis; primary author, USEPA's The Clean Water and Drinking Water Infrastructure Gap Analysis; 25 years EPA – development of financing programs; BA, MA, MPA.

Mr. Duncan Rose – Vice President & Technical Director – Asset Management Group, GHD Inc.; former city/county manager; co-author of WEF's textbook, Managing the Water and Wastewater Utility; 30 years state & local government management; Adjunct Faculty, Florida State University, Askew School of Public Policy; BA, MSP, MAPA.

Mr. Doug Stewart, P.E. – Principal Consultant, GHD Inc.; former Asset Management Program Director, Orange County Sanitation District; 25 years engineering experience, 10 years utility management; BS, MSCE.

Overnight Hotel Accommodations

A limited number of rooms are reserved at the **Keystone Conference Village**. Reservations must be made through the RMWEA / RMSAWWA joint conference housing service by clicking on the Annual Conference link at <http://www.rmsawwa.net/> or <http://www.rmwea.org/>, or by calling TEAMS at 303.394.3450, for the discounted room rate of \$120 for a single. Other housing options are also available at the Keystone Lodge. The reservation deadline is **August 15, 2007**. Note this date is two weeks earlier than the registration deadline.

More information about the workshop and asset management is available at www.epa.gov/owm/assetmanage/assets_training.htm

Questions? Contact Laura LaRiviere, P.E., Workshop Coordinator at llariviere@kleinfelder.com or 303-237-6601.

Registration: \$100 if also registered for the Joint Conference, \$200 if registering for the workshop only. **Includes workshop and lunch daily.** Seats are limited, please register early.

Cancellations: \$30 Fee Assessed for Cancellations up to August 29, 2007. NO REFUNDS after August 29, 2007. Send cancellation requests to TEAMS.

Workshop is subject to cancellation if minimum number of registrations is not received by August 29, 2007.

Training Credits

RMSAWWA and RMWEA have requested Operator Training credits for Colorado, Wyoming and New Mexico. Credit is pending and we do not foresee any issues with obtaining Operator Training credits.

Registration Form

Name _____

Badge Name _____

Name for conference ID badge, such as nickname, if desired

Organization _____ Fax# _____

Mailing Address _____

City, State, Zip Code _____

Daytime Phone _____ E-mail _____

Registration Fee: \$100 (if attending the Joint Conference) \$200 (for Workshop only)

Receipts will be available at the workshop registration desk.

_____ Check enclosed (mail registration form & check, make checks payable to RMWEA)

_____ Charge my credit card (mail or fax registration form)

☐ VISA ☐ MasterCard

Credit Card No. _____

Expiration Date _____

Card Holder Name PLEASE PRINT _____

Card Holder Signature _____

Credit card billing address:

Mailing Address: _____

City, State, Zip Code: _____

Send registration form and payment to: **TEAMS for RMWEA**

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